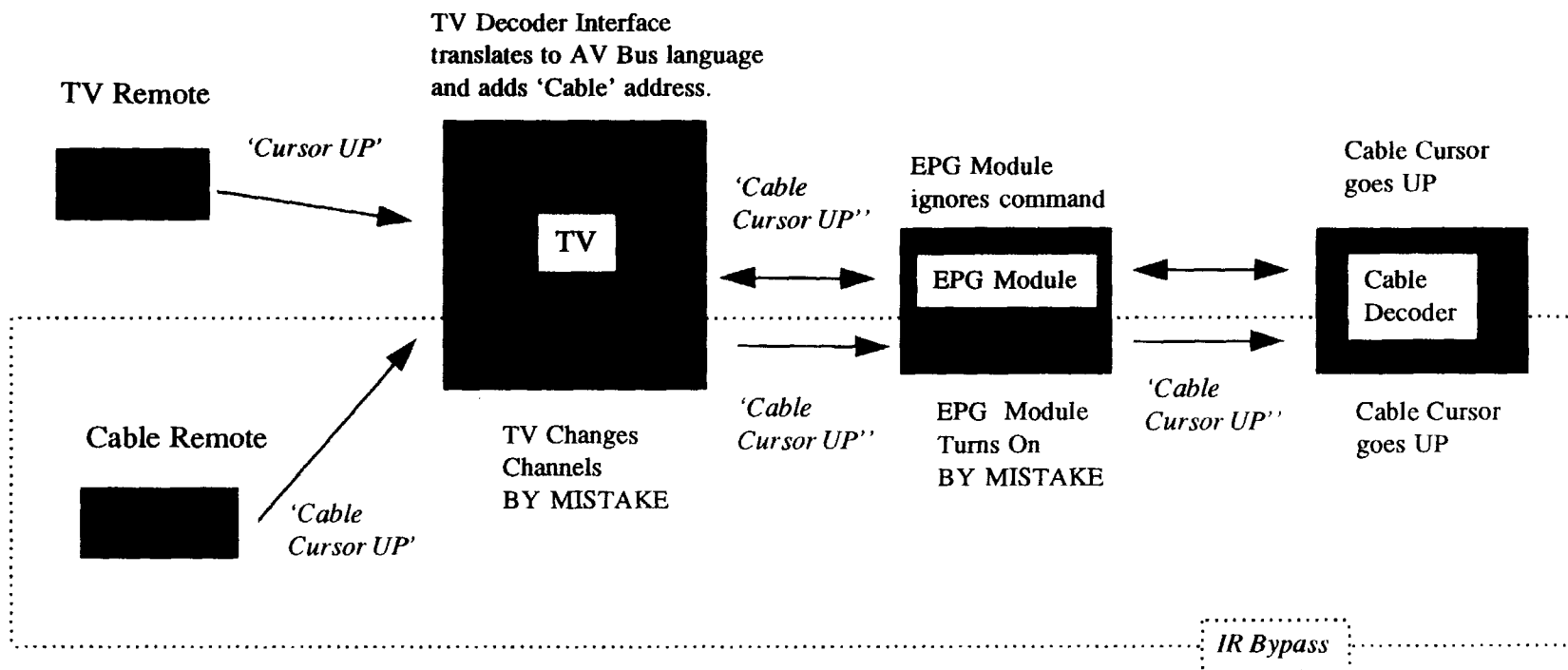


# IR Bypass = Bad Engineering

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# IR Bypass = Additional Cost

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- ◆ Current IR receivers are customized for a specific manufacturer's IR transmission scheme and codes.
- ◆ As a result, current IR receivers will not pass all IR transmissions.
- ◆ Adding IR Bypass will require adding a second IR receiver to 'cable-ready' models.

# There is a Solution!

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- ◆ That requires minimal regulation.
- ◆ That produces maximum competition.
- ◆ That separates security from other features.
- ◆ That ensures the competitive supply of non-security features.
- ◆ That places no constraints on future technologies or services.

## *A Descrambling-Only* Interface will satisfy Congress, the FCC, and Industry

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- ◆ The FCC should adopt a Decoder Interface for “cable-ready” equipment that does nothing more than allow for the descrambling of cable signals.
  
- ◆ Such an Interface --
  - Is simple.
  - Has for all practical purposes been designed.
  - Allows all non-security features to be provided competitively.
  - Ends the debate over the Decoder Interface and cable’s proposed IR Bypass.
  
- ◆ The FCC should prescribe the same descrambling-only interface for set-top boxes to promote the competitive supply of these devices.

# The Benefits

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## *To Consumers*

- ◆ Ability to choose between integrated equipment or components.
- ◆ Ability to buy TVs and VCRs with built-in features that operate with cable service.
- ◆ Ability to rent or buy set-top boxes from cable or other sources.
- ◆ Elimination of any “bottleneck” at the interface between services and equipment.
- ◆ Availability of new and innovative equipment of higher quality at lower prices in a competitive market.

# The Benefits

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## *To Cable*

- ◆ Ability to prevent signal theft
- ◆ Ability to supply non-security boxes to subscribers in a competitive market.
- ◆ Decline in maintenance and capital costs, as consumers obtain equipment from competitive sources.

## *To Other Video Service Providers*

- ◆ Creation of level playing field with cable service.
- ◆ The true cost of cable service will be disclosed when equipment rental costs are revealed.

# The Benefits

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## *To Consumer Electronics Manufacturers*

- ◆ Ability to supply non-security features in competitive market, either as components or as part of an integrated product.
- ◆ Enhanced features of consumer electronics equipment will not be disabled by cable boxes.
- ◆ Fewer complaints about cable compatibility.

## *To Retailers*

- ◆ Creation of new market for retail sale of non-security set-top boxes.
- ◆ Fewer complaints about cable compatibility.

# Electronic Industries Association Consumer Electronics Group

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## Presentation on the Decoder Interface Competition and Consumer Protection

ET DOCKET NO. 93-7  
FEBRUARY 21, 1995

# ‘Set-top Boxes’

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- ◆ ‘Set-top boxes’ and ‘built-ins’ can coexist.
  - 13MM VCRs/yr., 4MM TV/VCRs/yr.
- ◆ The ‘box’ isn’t the problem, scrambling is.
- ◆ The only feature that is defeated by cable is tuning - because of scrambling.
- ◆ A descrambling-only interface restores the ability of TVs and VCRs to tune channels as designed.

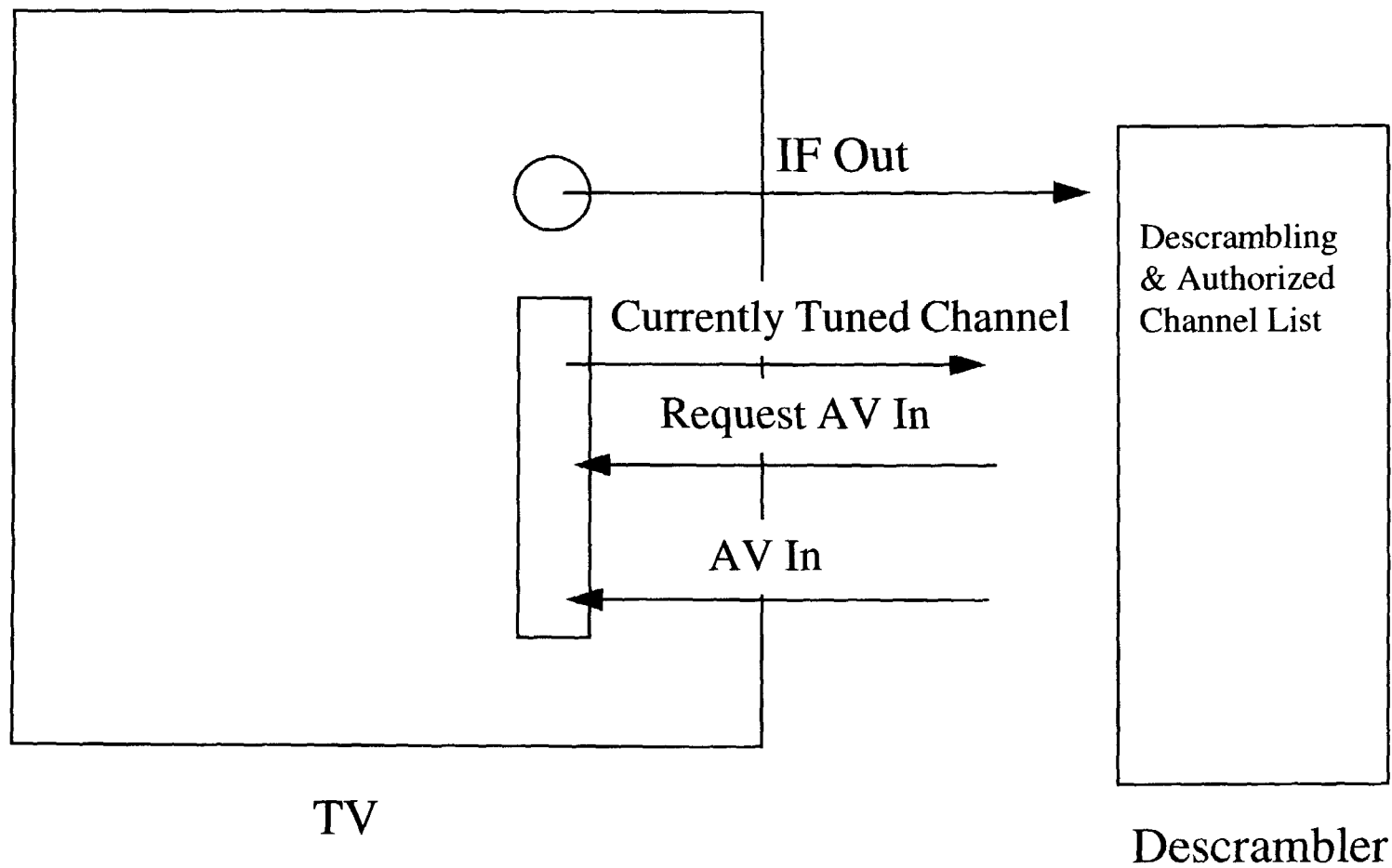
# A Comparison

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|                        | <b>O riginal Decoder<br/>Interface</b> | <b>D escrambling-only<br/>Interface</b> |
|------------------------|--|---|
| <b>B asic</b>          | <i>Not Req'd</i>                       | <i>Not Req'd</i>                        |
| <b>E xpanded Basic</b> | <i>Nothing or Descrambler</i>          | <i>Nothing or Descrambler</i>           |
| <b>P remium</b>        | <i>Descrambler</i>                     | <i>Descrambler</i>                      |
| <b>P ay Per View</b>   | <i>Descrambler</i>                     | <i>Descrambler</i>                      |
| <b>M enu PPV</b>       | <i>Interface box +<br/>Descrambler</i> | <i>Interface box +<br/>Descrambler</i>  |
| <b>D igital</b>        | <i>Digital Demod +<br/>Descrambler</i> | <i>Digital Demod +<br/>Descrambler</i>  |

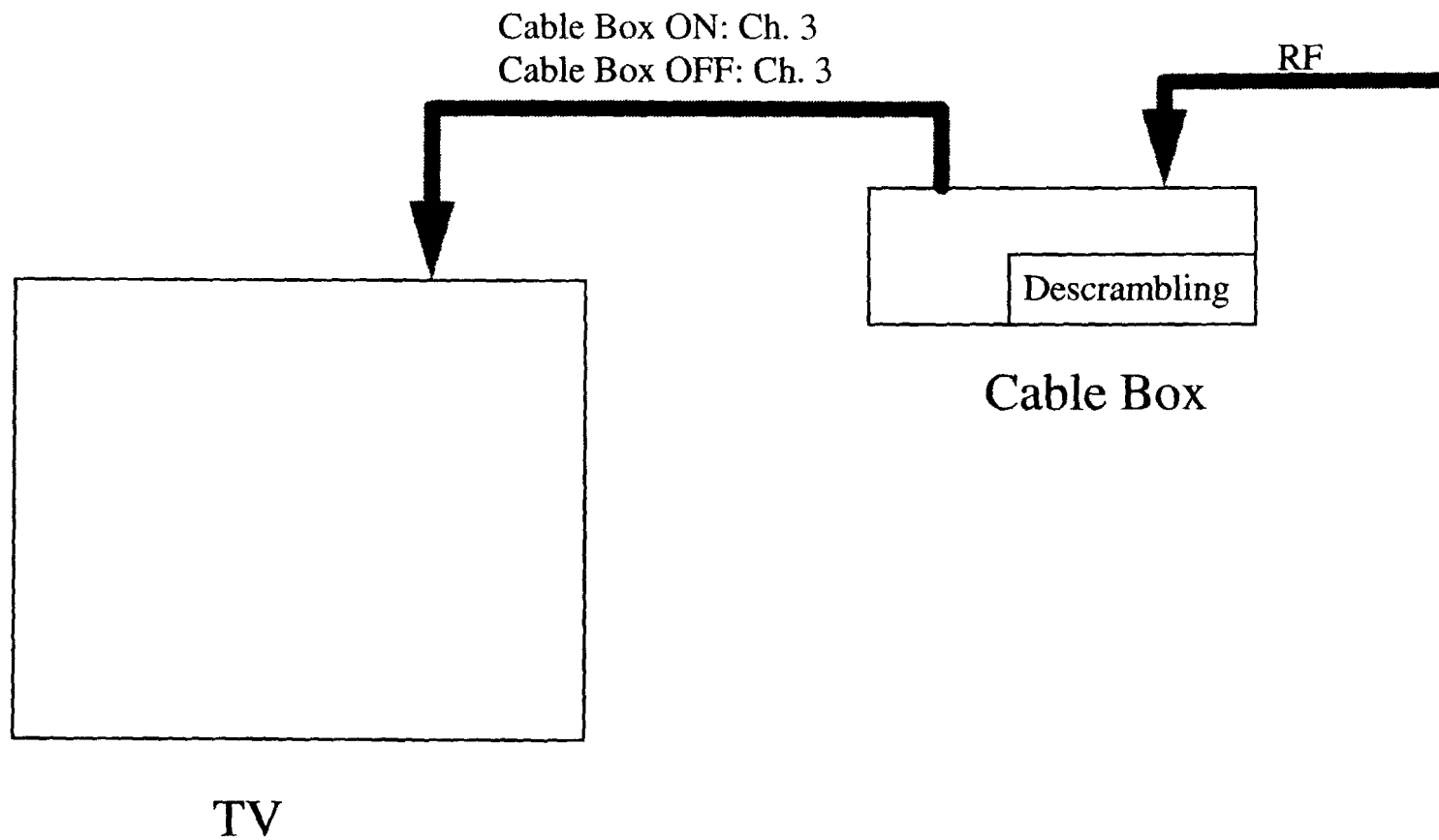
# Descrambler Interface

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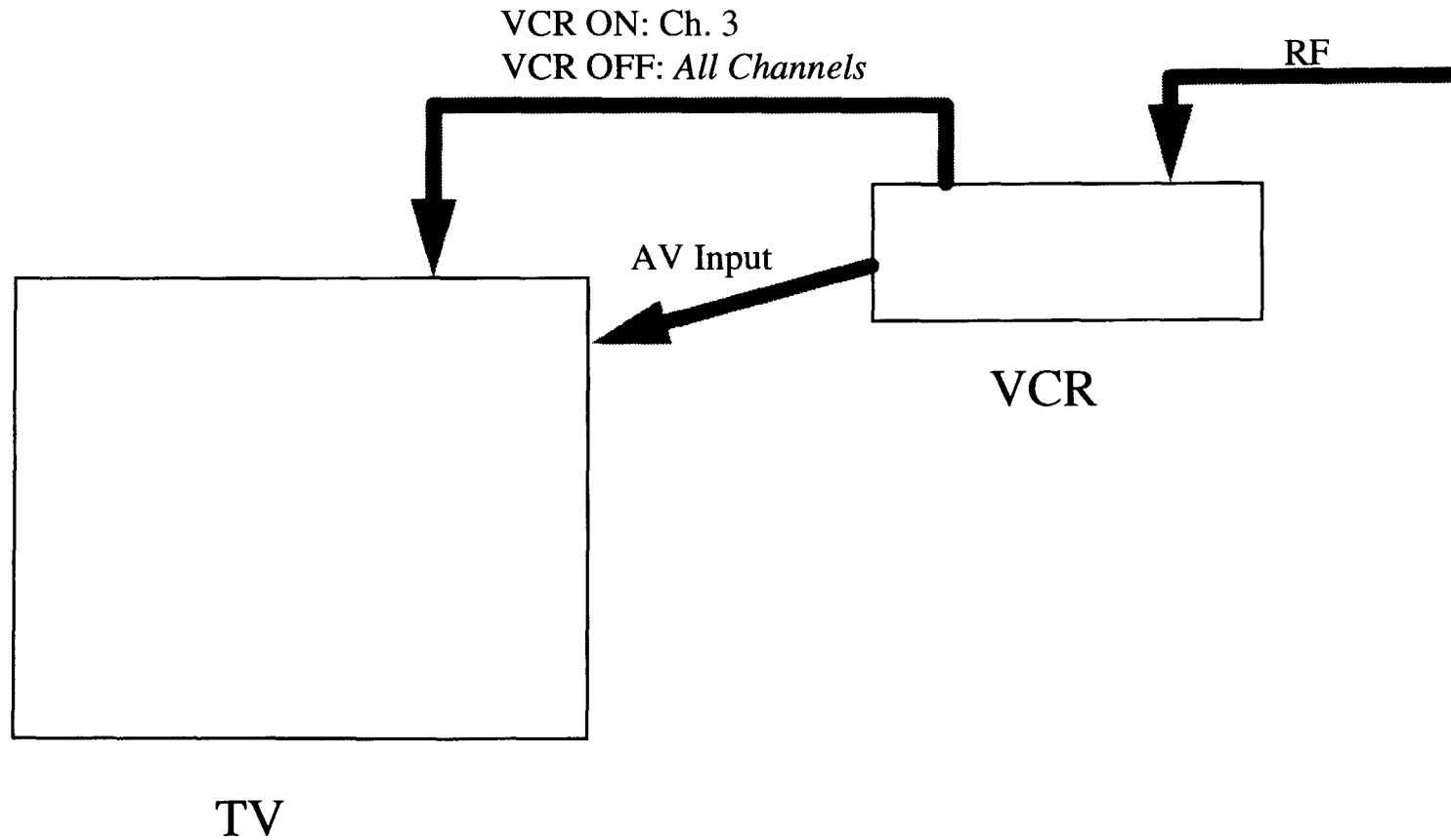
# The Cable Box Problem

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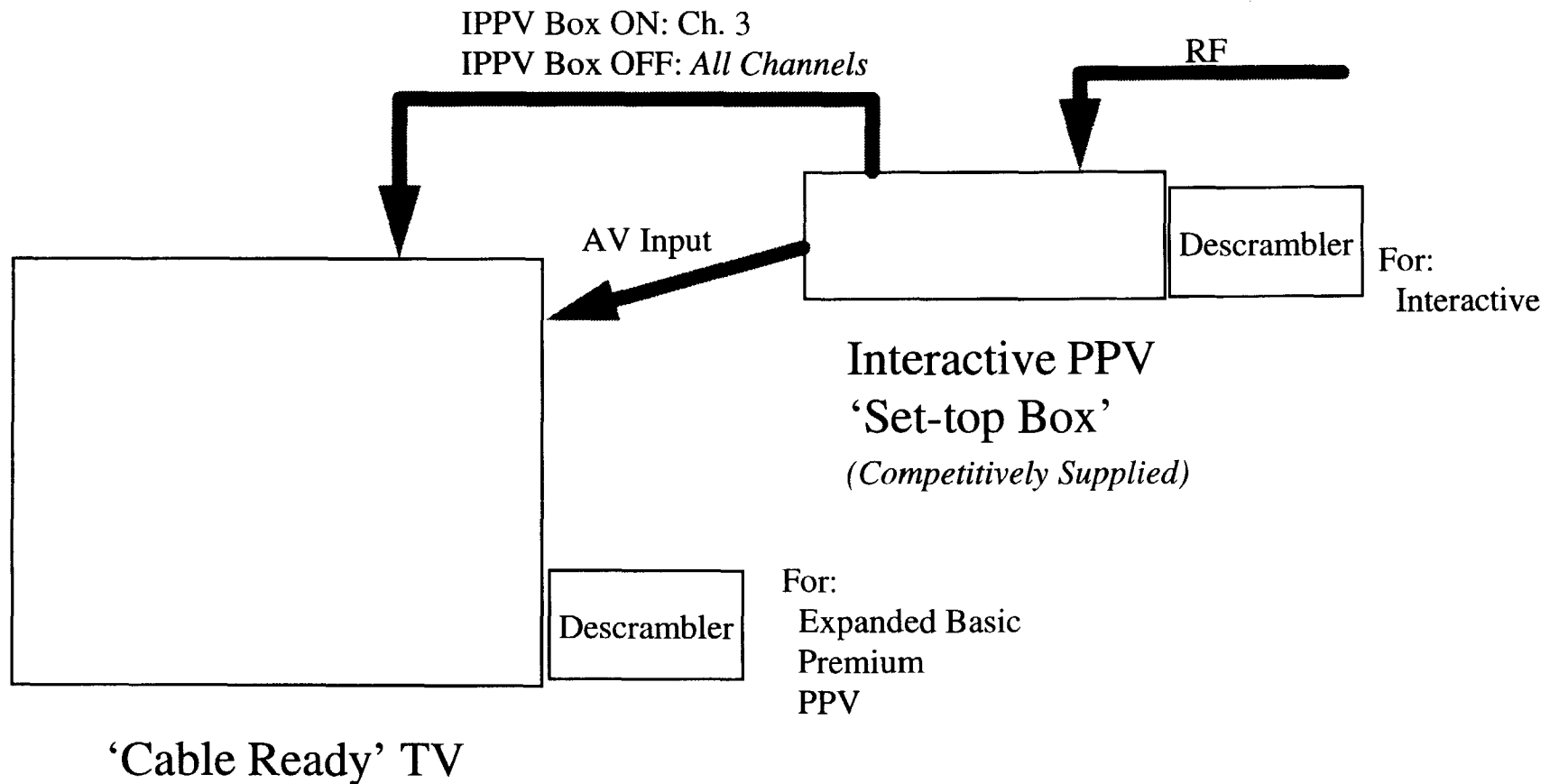
# The 'VCR Set-top Box'

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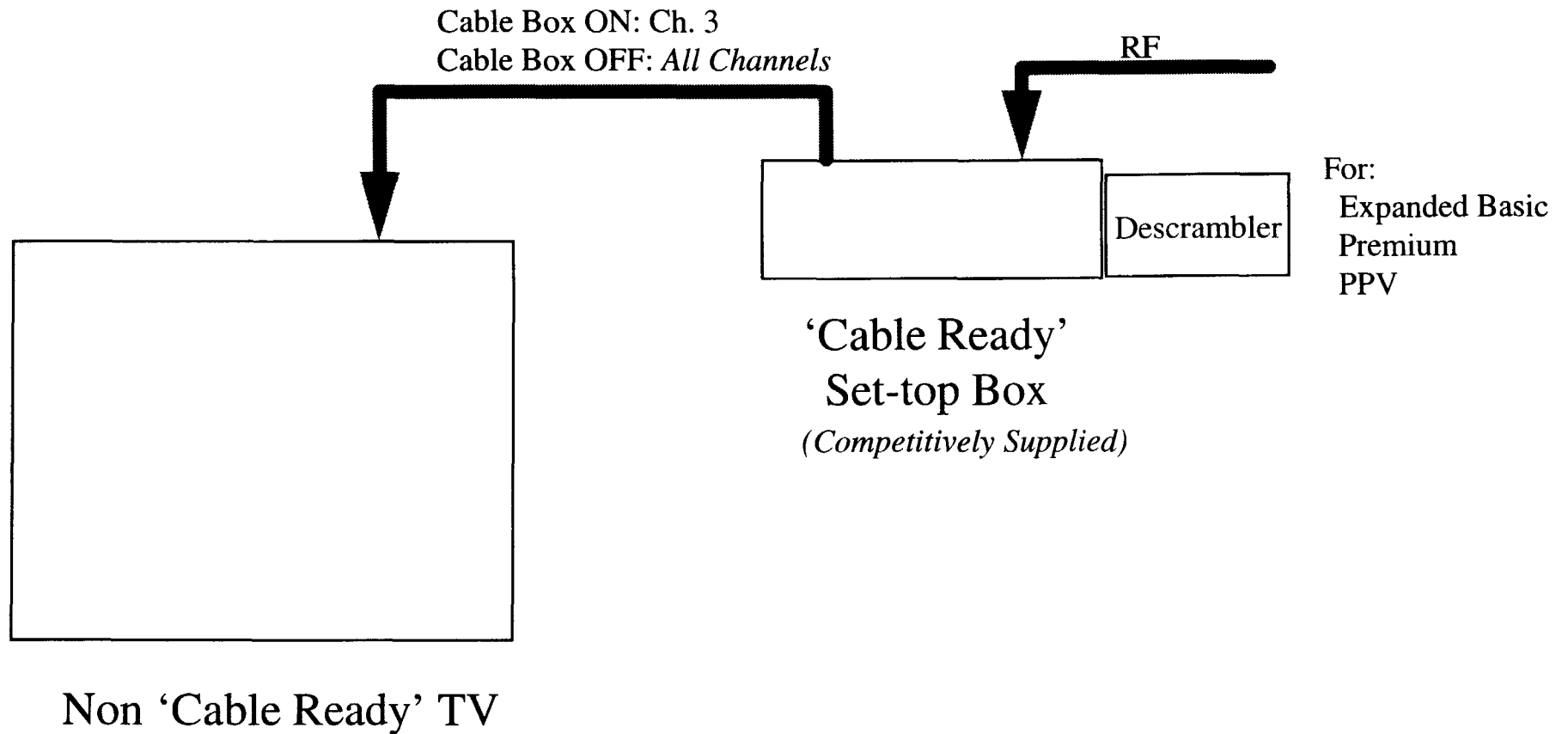
# The 'Interactive PPV Set-top Box'

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# The 'Cable Ready' Set-top Box

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# The 'Cable Ready' TV and VCR

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